

## ABSTRACT OF THE DISCLOSURE

A method and apparatus for water management in a direct oxidation fuel cell system includes a direct oxidation fuel cell, including: a housing surrounding an  
5 anode, a cathode, a protonically conductive electronically non-conductive membrane electrolyte disposed between the anode and the cathode, a current collector, and a gas-permeable liquid-impermeable membrane disposed on a side of the cathode opposite the electrolyte. Excess water accumulation is removed from an area between the  
10 membrane electrolyte and the gas-permeable liquid-impermeable membrane by a pressure differential generated, preferably by a pump. The pressure differential draws air to the surface of, into, or through the cathode diffusion layer. The pump can be driven by the electricity generated by the fuel cell.

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